

## INTISARI

Temulawak merupakan salah satu tanaman yang berkhasiat untuk mengobati penyakit antara lain penyakit radang hati. Temulawak telah dibuktikan memiliki komponen aktif antara lain *kurkuminoid*. Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan Avicel PH 102<sup>®</sup> sebagai bahan penghancur terhadap sifat fisik tablet ekstrak temulawak yang dibuat secara granulasi kering.

Pada penelitian ini dibuat lima formula dengan variasi kadar Avicel PH 102<sup>®</sup> 5%, 7,5%, 10%, 12,5%, 15%. Bahan dicampur dan digranul untuk tiap-tiap formula, kemudian dilakukan uji sifat fisik granul yang dihasilkan, yang meliputi waktu alir dan kompaktilitas. Setelah campuran tersebut dikempa menjadi tablet, dilakukan uji sifat fisik tablet, yang meliputi keseragaman bobot, kekerasan, kerapuhan, daya serap, dan waktu hancur. Data dianalisis secara statistik menggunakan anava satu arah dan uji korelasi sederhana.

Hasil penelitian menunjukkan, bahwa semua formula memenuhi syarat sifat fisik tablet, untuk keseragaman bobot, kerapuhan, daya serap, dan waktu hancur. Diantara formula tersebut, formula V dengan menggunakan Avicel PH 102<sup>®</sup> dengan konsentrasi 15% memiliki waktu hancur yang paling cepat. Hasil uji KLT menunjukkan bahwa zat aktif dalam ekstrak temulawak tetap stabil setelah mengalami proses granulasi maupun pengempaan.

## ABSTRACT

Temulawak is a kind of medical herbs which is useful to relieve illness such as hepatitis. It was proved to have the active components such as kurkuminoid. This research was aimed to observe the effects of Avicel PH 102<sup>®</sup> as disintegrant to physical characteristics of Temulawak extract tablets by dry granulation method.

This research was conducted using five formulas with Avicel PH 102<sup>®</sup> concentration variation of 5%, 7,5%, 10%, 12,5%, 15%. The materials mixed and granulated for each formula, and the physical characteristics of granules resulted were observed by performing tests of flow time and compactibility. After the mixture was compressed, the physical characteristic of tablets were observed by performing tests of weight uniformity, hardness, friability, absorption capacity, and disintegration time. The data were analyzed statistically using one way anova and bivariate correlation test..

The result showed that all formulas requirements the physical characteristic of tablets for uniformity, friability, absorption capacity, and disintegration time. Among those formulas, the formula V with 15% Avicel PH 102<sup>®</sup> has the faster disintegration time. The result of TLC (Thin Layer Chromatography) showed that the active substances in Temulawak extract stable after granulation or compression process.